

Remarks

The Office Action mailed June 6, 2006 has been carefully reviewed and the foregoing amendments have been made in consequence thereof.

Claims 1-20 are now pending in this application. Claims 1-6 have been withdrawn from consideration. Claims 7-20 stand rejected.

Entry of this amendment is proper under 37 CFR § 1.116 since the amendment: (a) places the application in condition for allowance for the reasons discussed herein; (b) does not raise any new issue requiring further search and/or consideration as the amendment relates to issues previously discussed throughout prosecution; (c) satisfies a requirement of form asserted in the Office Action; (d) does not present any additional claims without canceling a corresponding number of finally rejected claims; and (e) places the application in better form for appeal, should an appeal be necessary. The amendments herein are necessary and were not earlier presented because they are made in response to arguments raised in the final Office Action. Entry of this amendment is thus respectfully requested.

The rejection of Claims 7-12 under 35 U.S.C. § 112 is respectfully traversed. Specifically, to expedite prosecution, Claim 7 has been amended to remove references to "the outlet end comprising a second cross-sectional shape that is non-rectangular". However, in contrast to the allegation in the Office Action, Applicants respectfully submit that the the present application does disclose a nozzle including an outlet end with a non-rectangular cross-sectional shape. For example, at least Figures 2-6 illustrate nozzles (53 and 80) that include an outlet end (73) having a non-rectangular cross-sectional shape (91). As such, Claim 7 has been amended, in accordance with the specification, to recite that the fluid flow passage has inlet and outlet portions that are each defined by an interior wall of the nozzle and that each portion has a cross-sectional shape different than the other. No new matter has been added.

Claims 8-12 depend, directly or indirectly, from independent Claim 7, and thus also are adequately disclosed in the present application. For at least the

reasons set forth above, Applicants respectfully request that the Section 112 rejection of Claims 7-12 be withdrawn.

The rejection of Claims 13-15, 19, and 20 under 35 U.S.C. § 102(b) as being anticipated by Miyano (U.S. Patent 4,564,431) ("Miyano") is respectfully traversed.

Miyano describes a tw-electroerosion machine that includes a double-floating nozzle assembly. The machine also includes a lower fluid delivery system (4) that has an inner movable nozzle (16) and an outer movable nozzle (20). Both nozzles (16 and 20) are slidably coupled to a hollow base member (5) having first and second internal fluid passage sets (6a, 6b, 6c, and 7a, 7b, 7c) that are supplied with pressurized first and a second inlet flows (F1 and F2), respectively. The inner nozzle (16) also includes an inlet portion that is slidably fitted onto a cap (14) to **surround** a guide tool member (1). The inner nozzle (16) includes an outlet portion (17) that forms an **annular** face (18) and that defines a principal nozzle orifice (19). Notably, the inner nozzle (16) does not include a fluid flow passage with opposing end portions having **different** cross-sectional shapes, but rather end portions with a **same** circular cross-sectional shape.

Claim 13 recites a machining system for machining a component, the machining system including "a tool . . . a component mounting fixture . . . and a coolant flow nozzle comprising a body, a first end, a second end, and an interior wall defining a fluid passage extending therebetween . . . said fluid passage comprising a first portion, a second portion and an intermediate portion extending therebetween . . . said first portion extending from said first end to said intermediate portion and having a first cross-sectional shape . . . said second portion extending from said intermediate portion to said second end and having a second cross-sectional shape that is different than said first cross-sectional shape"

Miyano does not describe or suggest a machining system as is recited in Claim 13. More specifically, Miyano does not describe or suggest a machining system including a coolant flow nozzle comprising a fluid passage having a first portion having a first cross-sectional shape and a second portion having a second cross-sectional shape with a **different shape** than the first cross-sectional shape.

Rather, in contrast to the present invention, Miyano describes inlet and outlet portions that have the **same** cross-sectional shape.

Claims 14, 15, 19, and 20 depend directly from independent Claim 13. When the recitations of Claims 14, 15, 19, and 20 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claims 14, 15, 19, and 20 are likewise patentable over Miyano.

For at least the reasons set forth above, Applicants respectfully request the Section 102 rejection of Claims 13-15, 19, and 20 be withdrawn.

The rejection of Claims 16-18 under 35 U.S.C. § 103(a) as being unpatentable over Miyano in view of Weber (U.S. Patent 5,029,759) (“Weber”) is respectfully traversed.

Miyano is described above. Weber describes a fuel injector nozzle including a curved spray hole (50), an injector nozzle tip (52), an interior wall (38), a nozzle sac (54), and an injector wall (60). Interior wall (38) defines a fuel cavity/flow passage through which fluid is forced through spray hole (50) when an injector plunger is inserted into the cavity. An outlet portion of the fluid cavity, adjacent exit tip (52), is formed with varying circular cross-sectional sizes. Notably, Weber does not mention a cross-sectional shape of an inlet portion of the cavity, but rather describes that a nozzle portion has the **same** circular cross-sectional shape as the tip (52) immediately upstream from the tip (52).

Claim 13 recites a machining system for machining a component, the machining system including “a tool . . . a component mounting fixture . . . and a coolant flow nozzle comprising a body, a first end, a second end, and an interior wall defining a fluid passage extending therebetween . . . said fluid passage comprising a first portion, a second portion and an intermediate portion extending therebetween . . . said first portion extending from said first end to said intermediate portion and having a first cross-sectional shape . . . said second portion extending from said intermediate portion to said second end and having a second cross-sectional shape that is different than said first cross-sectional shape”

Neither Miyano nor Weber describe or suggest a machining system as is recited in Claim 13. More specifically, neither Miyano nor Weber describe or suggest a machining system including a coolant flow nozzle comprising a fluid passage having a first portion having a first cross-sectional shape and a second portion having a second cross-sectional shape that has a **different shape** than the first cross-sectional shape. Rather, in contrast to the present invention, Miyano describes inlet and outlet portions that have the **same** cross-sectional shape, and similarly, Weber describes a nozzle portion having the same circular cross-sectional shape as the tip portion.

Claims 16-18 depend directly from independent Claim 13. When the recitations of Claims 16-18 are considered in combination with the recitation of Claim 13, Applicants submit that dependent Claims 16-18 are patentable over Miyano in view of Weber.

Moreover, Applicants respectfully submit that the Section 103 rejections of Claims 16-18 are not proper rejections. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Miyano nor Weber, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Miyano with Weber because there is no motivation to combine the references suggested in the cited art itself.

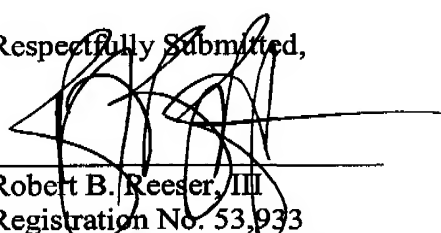
As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching or suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible.

Accordingly, for at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 16-18 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



Robert B. Reeser, III
Registration No. 53,933
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070